



EUROPEAN PATENT APPLICATION

(88) Date of publication A3:
13.03.2002 Bulletin 2002/11

(51) Int. Cl.⁷: F16J 15/32

(43) Date of publication A2:
13.06.2001 Bulletin 2001/24

(21) Application number: 00127000.8

(22) Date of filing: 08.12.2000

(84) Designated Contracting States:
AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU
MC NL PT SE TR
Designated Extension States:
AL LT LV MK RO SI

(72) Inventor: **Coscia, Flavio**
14100 Asti (IT)

(74) Representative: Eccetto, Mauro et al
Studio Torta S.r.l.,
Via Viotti, 9
10121 Torino (IT)

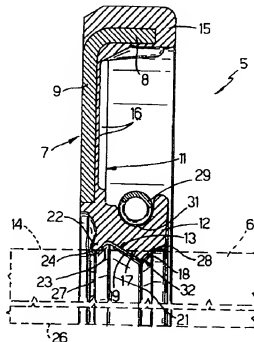
(30) Priority: 10.12.1999 IT TO991087

(71) Applicant: RFT S.p.A.
10121 Torino (IT)

(54) **A low-friction seal assembly, in particular for a rolling-element bearing, and a manufacturing method therefor**

(57) A seal assembly (5) which includes an annular metal frame (7) and an elastomeric seal element which includes at least one lip (12) in vulcanized rubber with a sealing surface (13) coated with a thin layer (32) of PTFE of less than 0.2mm; the seal assembly is obtained by a method which includes the steps of vulcanizing the

said elastomeric seal assembly with the said lip (12) on the said frame (7), spraying a polymerizable aqueous solution of PTFE onto the sealing surface (13) so as to apply a thin layer (32) of the said solution, and polymerizing the layer (32) whereby it becomes constituted of PTFE adhering mechanically to the sealing surface (13).



European Patent
Office

EUROPEAN SEARCH REPORT

Application Number
EP 00 12 7000

DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (InCL7)
X, P	EP 1 008 775 A (SKF INDUSTRIE) 14 June 2000 (2000-06-14) * claims 1,6,7; figures *	1,6	F16J15/32
X	PATENT ABSTRACTS OF JAPAN vol. 2000, no. 02, 29 February 2000 (2000-02-29) & JP 11 325256 A (KOYO SEIKO CO LTD), 26 November 1999 (1999-11-26) * abstract *	1-5	
X	PATENT ABSTRACTS OF JAPAN vol. 1998, no. 11, 30 September 1998 (1998-09-30) & JP 10 169786 A (KOYO SEIKO), 26 June 1998 (1998-06-26) * abstract *	1	
X	FR 2 713 299 A (LE JOINT FRANÇAIS) 9 June 1995 (1995-06-09) * claims 4,5,10; figures *	6-10	
A	DOW CORNING: "Molykote D96" 9 June 1998 (1998-06-09), DOW CORNING, WIESBADEN (DE) XP002185631 * page 1 - page 4 *	1,6-10	F16J
<div style="text-align: center;">The present search report has been drawn up for all claims</div>			
Place of search THE HAGUE		Date of completion of the search 14 December 2001	Examiner Narminio, A
<div style="display: flex; justify-content: space-between;"> <div> <p>CATEGORY OF CITED DOCUMENTS</p> <p>X: particularly relevant if taken alone</p> <p>Y: particularly relevant if combined with another document of the same category</p> <p>A: technological background</p> <p>O: non-written disclosure</p> <p>P: intermediate document</p> </div> <div> <p>T: theory or principle underlying the invention</p> <p>E: earlier patent document, but published on, or after the filing date</p> <p>D: document cited in the application</p> <p>L: document cited for other reasons</p> <p>&: member of the same patent family, corresponding document</p> </div> </div>			

EPO FORM 1503 (3.11.99) (P4/C21)

ANNEX TO THE EUROPEAN SEARCH REPORT ON EUROPEAN PATENT APPLICATION NO.

EP 00 12 7000

This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report. The members are as contained in the European Patent Office EDP file on The European Patent Office is in no way liable for these particulars which are merely given for the purpose of information.

14-12-2001

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
EP 1008775	A	14-06-2000	EP 1008775 A2	14-06-2000
JP 11325256	A	26-11-1999	NONE	
JP 10169786	A	26-06-1998	NONE	
FR 2713299	A	09-06-1995	FR 2713299 A1	09-06-1995

EP 1 106 878 A3

For more details about this annex : see Official Journal of the European Patent Office, No. 12/82